



All-Plastic Duplex Basket Strainer

Best for Corrosive Service

Sizes 1/2" to 4" • PVC or CPVC • Threaded or Flanged



Features

- Continuous Flow, no shut down for basket cleaning
- Excellent corrosion resistance
- No process media contamination
- Rated to 150psi
- Hand removable cover
- Perforated plastic baskets 1/32, 1/16, 3/16, 1/8
- Threaded drain
- In-line design
- No painting or coatings requires

Options

- Perforated or mesh lined stainless steel baskets

In many corrosive or sensitive process media straining applications, plastic is the preferred material of construction for a duplex strainer. Hayward's All Plastic Duplex Basket Strainers are resistant to a wide variety of corrosive acids and other aggressive materials. They will work in applications that might require a much more expensive exotic alloy strainer – if one were even available. And because they are plastic they will not contaminate sensitive process media such as photographic chemicals and de-ionized water.

Flow is diverted from one strainer basket to the other by an all-plastic, three-way ball valve assembly. A quick turn of the handle diverts the flow. The handle points to the basket chamber in service, making it easy to determine which basket needs servicing. The strainer covers spin off for fast and easy access to the baskets for cleaning or change out.

Viton® seals are standard on all sizes of Hayward's All-Plastic Duplex Basket Strainers. The cover o-rings are a piston seal assuring a leak tight assembly with the covers only hand tight. These duplex strainers come standard with two perforated all-plastic baskets made of the same material as the strainer itself. This makes determination of chemical compatibility for an

application much easier than if two different materials were involved. For finer straining applications, stainless steel baskets are available in mesh sizes from 20 to 325.

Plastic duplex strainers can be used in many applications, even some that you may have thought would require metal strainers. Thinking of replacing a metal strainer with a plastic one to take advantage of lower costs and better corrosion resistance? First take a look at the temperature/non-shock pressure chart to see if your application falls within range of the plastic material you are considering. If it does, and chemical resistance is not a problem, then the other consideration is the actual installation itself. Contact Hayward for specific recommendations for your system. These recommendations may include things such as proper alignment of the strainer in the piping system to eliminate stress, correct support for the strainer and installation of spool pieces of plastic pipe or expansion joints.

Hayward All-Plastic Duplex Basket Strainers are the answer to highly corrosive or ultra-pure applications. They are available in PVC (or CPVC for higher temperatures), in sizes up to 4" with socket, threaded or flanged connections. They are rated at 150 psi at 70°F in most applications.

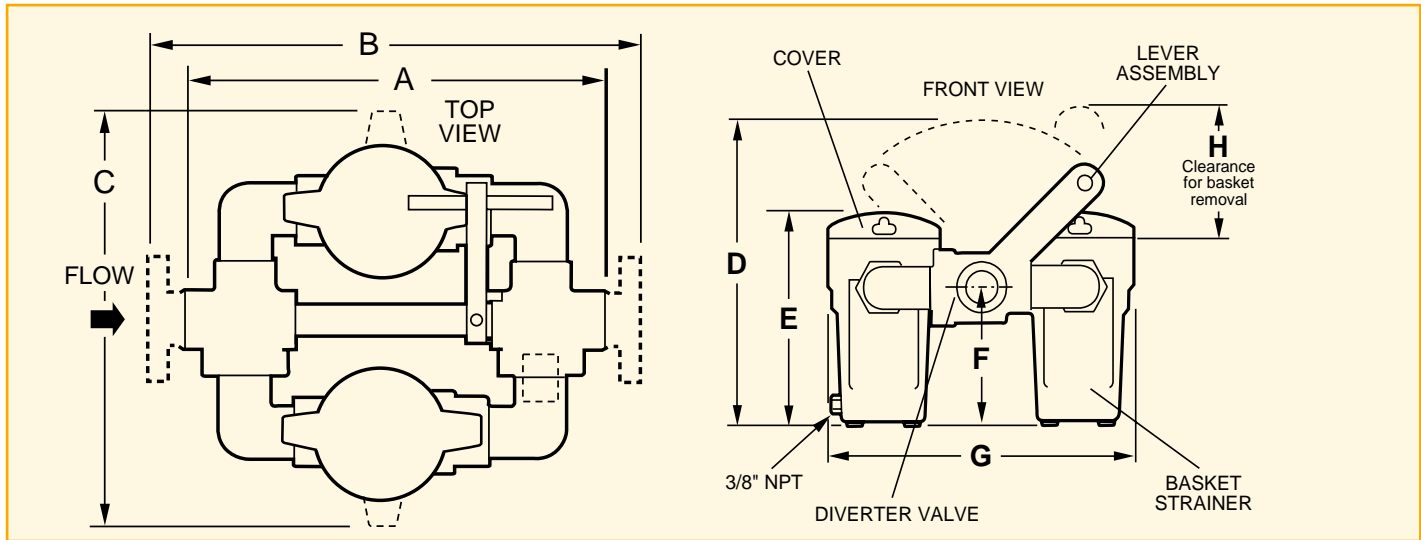
Selection Chart

Size	Material	End Connections	Seals	Pressure Rating
1/2" to 4"	PVC or CPVC	Socket, Threaded or Flanged	Viton®	150 psi @ 70F

All-Plastic Duplex Basket Strainer



Technical Details



Dimensions and weights are for reference only. Contact Hayward for certified drawings.

Dimensions - (inches / mm)

Size	A	B	C	D	E	F	G	H	Weight (lb / kg)	
									Skt / Thd	Flg
1/2"	15.25 / 387	17.00 / 432	15.13 / 384	12.00 / 305	8.50 / 216	5.25 / 133	12.75 / 324	7.00 / 178	10.75 / 4.89	11.75 / 5.34
3/4"	15.25 / 387	17.50 / 445	15.13 / 384	12.00 / 305	8.50 / 216	5.25 / 133	12.75 / 324	7.00 / 178	10.75 / 4.89	11.75 / 5.34
1"	15.25 / 387	17.75 / 451	15.13 / 384	12.00 / 305	8.50 / 216	5.25 / 133	12.75 / 324	7.00 / 178	10.75 / 4.89	11.75 / 5.34
1-1/2"	22.50 / 578	25.50 / 648	22.50 / 572	16.00 / 406	12.38 / 314	8.00 / 203	19.13 / 486	10.25 / 260	33.00 / 15.0	34.50 / 15.68
2"	22.50 / 578	25.63 / 651	22.50 / 572	16.00 / 406	12.38 / 314	8.00 / 203	19.13 / 486	10.25 / 260	33.00 / 15.0	35.50 / 16.14
3"	32.00 / 813	36.00 / 914	32.00 / 813	23.75 / 603	16.90 / 429	10.62 / 270	25.00 / 635	12.50 / 318	93.00 / 42.3	98.00 / 44.5
4"	35.50 / 902	40.75 / 1035	35.25 / 895	28.00 / 711	21.13 / 537	14.80 / 376	28.50 / 724	16.50 / 419	99.00 / 45.0	107.00 / 48.6

C_v Factors*

Size	Value	Size	Value
1/2"	3.0	2"	38
3/4"	4.8	3"	110
1"	9.0	4"	280
1-1/2"	15		

* For water with clean, perforated basket
The above C_v Factors were determined using a 1/16" perforated plastic basket.

Basket Perforation Correction Factors

Plastic Baskets		Stainless Steel Baskets	
1/32"	1.05	1/32"	.82
1/16"	1.00	3/64"	.63
1/8"	.58	1/16"	.74
3/16"	.46	20 Mesh	.79
		40 Mesh	1.01
		60 Mesh	1.20
		80 Mesh	1.16
		100 Mesh	1.20
		200 Mesh	1.09
		325 Mesh	1.22

Pressure Drop Calculations

The pressure drop across the strainer, for water or fluids with a similar viscosity, can be calculated using the formula below:

$$\Delta P = \left[\frac{Q}{C_v} \right]^2 \quad \text{Where } \Delta P = \text{Pressure Drop}$$

$$Q = \text{Flow in GPM}$$

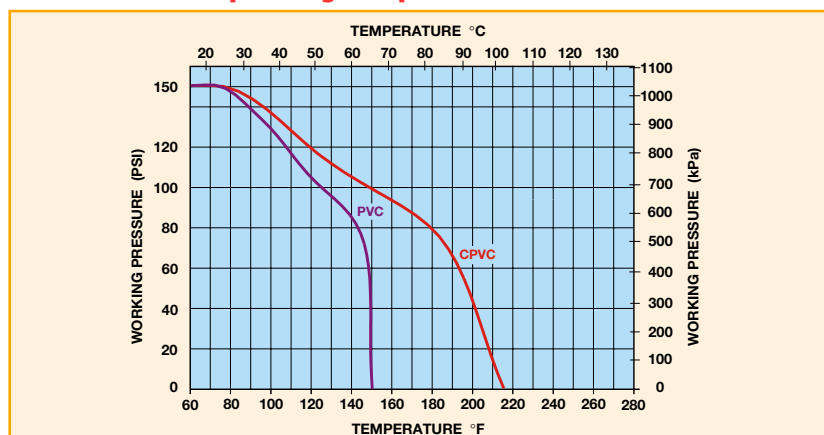
$$C_v = \text{Flow Coefficient}$$

Pressure Drop Calculation Example

The pressure loss for a 2" duplex strainer in water service, with a clean 100 mesh basket at 40 gpm, would be:

$$(40 / 38)^2 = 1.1 \times \text{correction factor of 1.20} = 1.3 \text{ psi}$$

Operating Temperature/Pressure



Basket Selection

- The 1/2" to 1" strainers can be ordered with either a 1/32" or 1/16" perf plastic basket.
- The 1-1/2" and 2" with a 1/32", 1/16", 1/8", or 3/16" perf plastic basket.
- The 3" and 4" with a 1/16", 1/8" or 3/16" perf plastic basket.
- Stainless steel baskets for all size strainers are available in these perfs: 1/32", 3/64", 1/16", 5/64", 7/64", 1/8", 5/32", 3/16", 1/4", 3/8", 1/2"; and in mesh sizes: 20, 40, 60, 80, 100, 200, 325.

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Map and Directions to Prosep Filters Limited



Leave M62 at Junction 24.

At roundabout adjacent to Cedar Court Hotel take 2nd exit onto dual carriageway (A629), signposted Halifax.

Take 1st exit slip road.

At roundabout at end of sliproad, take 3rd exit off.

This is the entrance to Lowfields Business Park.

Proceed straight over 1st roundabout.

At next roundabout take 2nd exit onto River Bank Way - Prosep Filters can be found on the left after the S-bend.

[Link to Google Maps](#)